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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/471,393 | 12/23/1999 | JAN STENSBORG | 0459-0386P | 7348 |

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[REDACTED] EXAMINER

JACKSON, MONIQUE R

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

1773

DATE MAILED: 04/01/2002

17

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-------------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/471,393 | STENSBORG ET AL. |
| | Examiner Monique R Jackson | Art Unit 1773 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 27 February 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 36-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 36-72 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 12/27/01 and 2/27/02 has been entered.
2. The amendments filed 12/27/01 and 2/27/02 have been entered. New claims 68-72 have been added. Claims 36-72 are pending in the application.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claims 36-67 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 36 recites the limitation "pressing into the first layer of non-metallic material an object comprising a surface so as to change surface properties of the first layer of non-metallic material in order to replicate at least one surface relief, said at least one surface relief forming part of the surface of the object; and wherein

the step of pressing is performed when said first layer of non-metallic material is in its dimensionally stable state." (Emphasis added.) However, the original disclosure at the time of filing does not provide support for this limitation, literally or implied, given the description at Page 3, lines 6-7, Page 4, lines 1-20, and Page 5, lines 8-12 and 14-16, which recites that the method includes the steps of providing a first layer of non-metallic material selected from the group consisting of lacquers, polymers, printing inks or any combination thereof, and a step of changing the surface properties of the first layer by pressing an object into the first layer by a rolling or stamping process with preferably, the providing of the first layer of non-metallic material and the changing of the surface properties is performed during essentially the same manufacturing process within a period of a few minutes, to produce a "replicated surface relief that is essentially permanent over time" which means "that the replicated surface is stable over a period of at least 12 months" and wherein the surface may alternatively be hardened so as to reduce wear of the surface of the produced object. Hence, based on this description, the original disclosure at the time of filing would not convey to one skilled in the art that the non-metallic layer formed from the lacquers and/or printing inks, which are typically liquid solutions, is in "its dimensionally stable state" at the time of pressing because: 1) the pressing is performed within a few minutes of providing the layer which is formed from a lacquers and/or printing inks which are by definition liquids upon application, 2) a replicated surface relief is formed by pressing an object into the non-metallic layer which would indicate that the non-metallic layer was able to be deformed and hence is not dimensionally stable, and 3) the replicated surface relief is stable over a period of at least 12 months which would indicate that the replicated surface relief may not be stable beyond 12

months and hence even the completed product is not dimensionally stable in terms of time as the dimension of interest.

6. Claims 36-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 36 recites the limitation “pressing into the first layer of non-metallic material an object comprising a surface so as to change surface properties of the first layer of non-metallic material in order to replicate at least one surface relief, said at least one surface relief forming part of the surface of the object; and **wherein the step of pressing is performed when said first layer of non-metallic material is in its dimensionally stable state.**” (Emphasis added.) However, given that the original disclosure at the time of filing fails to provide a clear definition or description of the term “its dimensionally stable state” it is not clear what is meant to be encompassed by this limitation given that the term “dimensionally stable” conventionally refers to a material that cannot be easily deformed as in a pressing or stamping process as in the instant invention, hence, it is unclear whether the limitation means that the first layer is in a dimensionally stable state based on ambient, i.e. temperature and pressure, or whether “its” refers to the final dimensional state of the first layer or any dimensional state, etc.

Claim Rejections

7. Claims 36, 53 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Wolf (USPN 3,937,852.) Wolf teaches a process for preparing a baked cracker which comprises taking a quantity of bakable cracker dough, (*first layer of non-metallic material*) having a rubbery consistency which tends to resume its original shape when free of compressive forces

(dimensionally stable state), placing the dough between two metal plates – a top and a bottom plate, preferably aluminum (*holding metal substrate*), wherein an appropriate design or surface texture may be embossed or engraved on the surfaces to be in contact with the dough (*object comprising a surface so as to change surface properties of the first layer of non-metallic material*) and the dough is baked while pressed between the two plates to provide a baked cracker with the desired shape or texture corresponding to the textured surface of the plate(s) (*replicated surface relief*) (Abstract; Col. 5, lines 54-60; Col. 6, lines 34-37; Figure 2.) Hence, given the broad language of the above claims, the invention taught by Wolf meets the limitation of the instant claims, wherein the bakable dough is a non-metallic material which is dimensionally stable, the metal plate(s) are holding metal substrate(s), and the baked cracker with a surface texture produced by the embossed or engraved design of the plates pressed against the dough is a replicated surface relief.

8. Claims 36-37, 39-49, 53-58, and 60-64 are rejected under 35 U.S.C. 102(e) as being anticipated by Choquette al (USPN 5,861,113) for the reasons recited in the prior office action dated 9/27/01, Paper No. 12, wherein the Examiner takes the position that the plastic material to be embossed as taught by Choquette et al is in a “dimensionally stable state” given plastic material can be embossed by a pressing or stamping process to produce a surface relief.

9. Claims 38, 47-52, 59, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choquette et al in view of Mallik et al (USPN 5,085,514) and in further view of the admitted prior art for the reasons recited in the prior office action dated 9/27/01, Paper No. 12.

10. Claims 36-37, 39-40, 46, 52-57, and 64-67 are rejected under 35 U.S.C. 102(e) as being anticipated by Schaefer et al (USPN 6,006,415) for the reasons recited in the prior office action dated 9/27/01, Paper No. 12, wherein the Examiner takes the position that the polyester coating on the aluminum cans (*food or beverage containers*) taught by Schaefer et al is in "its dimensionally stable state" given that a holographic image may be produced in the coating by a rolling or stamping process to produce an extremely attractive can wherein a combination of decorative coatings (colored print layer) may be applied to the surface of the can in combination with the holographic image.

11. Claims 38, 47-51, 59 and 68-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaefer et al in view of Mallik et al (USPN 5,085,514) for the reasons recited in the prior office action dated 9/27/01, Paper No. 12, wherein it would have been obvious to one having ordinary skill in the art to utilize routine experimentation to determine the optimum resin layer thickness to utilize based on the desired diffraction pattern to be embossed given that it would have been obvious to one skilled in the art that the resin layer would need to be of sufficient thickness to hold the entire embossed pattern desired for a particular end use. Further, though Schaefer et al teach that the holograph embossing process can be used in conjunction with decorative coatings to provide an extremely attractive can, Schaefer et al do not specifically teach that the can is coated with a colored layer on the surface of the can prior to coating with the embossing resin. However, the use of colored layers applied directly on the surface of the aluminum can to produce decorated aluminum cans is well known and conventional in the art to provide desired product information or desired decorative designs. Further, the use of holographic images over printed or decorative

coatings on substrates (*colored print layer in between the substrate and the surface relief*) to provide tamper-proof and/or extremely attractive products is well known and conventional in the art as evidenced by Mallik et al (Col. 5, lines 15-24) and would have been obvious to one having ordinary skill in the art based on the desired end use and desired decorative pattern of the end product taught by Schaefer et al.

12. Claims 41-42, 45, 58, and 60-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaefer et al in view of Mallik et al for the reasons recited in the prior office action dated 9/27/01, Paper No. 12.

13. Claims 36-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miekka et al in view of Formosa (USPN 4,913,858) and in further view of Mallik et al for the reasons recited in the prior office action wherein the Examiner takes the position that the thermosensitive plastic layer taught by Miekka et al to be embossed is "dimensionally stable" given that it can be embossed to hold a diffraction or holographic pattern.

Response to Arguments

14. Applicant's arguments filed 2/27/02 are not persuasive with regards to the term "its dimensionally stable state" for the reasons discussed in detail above in paragraphs 5 and 6. Further, the Applicant argues that Fig. 8 shows a rolling process where the replicating tool 8 continuously replicates surface relief in the non-metallic layer 2 and that the process can obviously not be performed if the non-metallic layer is not in its dimensionally stable state and further argues that Fig. 8 forms a basis for the amendments. However, the Examiner takes the position that Figure 8 actually teaches away the term conventional accepted meaning of the term "dimensionally stable state" given that the figure clearly shows that the layer is

easily deformed by replicating tool 8 which would indicate that the layer is not dimensionally stable. Hence, for this reason in addition to those as discussed in Paragraph 5, a “new matter” rejection is appropriate. In the response filed 12/27/01, the Applicant argues that the prior art references teach the skilled person either to emboss into a heated or non-cured layer which “is not dimensionally stable, and subsequently to cure the layer in order to obtain a permanent relief” wherein embossing into a heated or non-cured layer requires pre-heating of the layer and/or a subsequent curing, however, the instantly claimed method is drafted in open language and hence does not exclude these additional steps to produce the surface relief. The Applicant further notes that nothing in the prior art hints at a stable non-metallic layer, however, as discussed above, the original disclosure at the time of filing does not provide support for the limitation “wherein the step of pressing is performed when said first layer of non-metallic material is in its dimensionally stable state.” The Examiner suggests that the Applicant utilize language in the claims that is supported by the original disclosure at the time of the invention to address the Applicant’s arguments, i.e. performing the rolling or stamping process “at room temperature” or producing a replicated surface relief that is “essentially permanent over time” or “stable over a period of at least 12 months.”

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone numbers for

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the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Monique R. Jackson
Patent Examiner
Technology Center 1700
March 25, 2002